



Water-Data Report 2008

01379780 GREEN POND BROOK BELOW PICATINNY LAKE, AT PICATINNY ARSENAL, NJ

PASSAIC RIVER BASIN

LOCATION.--Lat 40°56'58", long 74°33'26" referenced to North American Datum of 1983, Rockaway Township, Morris County, NJ, Hydrologic Unit 02030103, on left bank 100 ft upstream from bridge on Whitmore Avenue at Picatinny Arsenal, 200 ft downstream from dam on Picatinny Lake, and 4.4 mi north of Dover.

DRAINAGE AREA.--9.16 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1984 to current year.

REVISED RECORDS.--WDR NJ-90-1: 1987 (M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 694.91 ft above NGVD of 1929 (U.S. Army, Picatinny Arsenal, benchmark).

REMARKS.--Records fair, except for estimated daily discharges and discharges below 0.20 ft³/s and above 500 ft³/s, which are poor. Occasional regulation at Picatinny Lake. Several measurements of water temperature were made during the year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of April 5, 1984 reached an elevation of 699.0 ft above NGVD of 1929 (200 ft upstream from bridge on Whitmore Avenue).

01379780 GREEN POND BROOK BELOW PICATINNY LAKE, AT PICATINNY ARSENAL, NJ—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES
[*e, estimated*]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	e0.07	16	14	58	16	28	16	12	8.2	0.94	2.0	0.35
2	e0.06	13	16	53	27	25	18	15	6.6	0.69	2.0	0.35
3	e0.05	11	24	46	26	20	16	15	5.2	0.50	2.0	0.35
4	e0.04	8.8	12	39	26	27	19	15	6.5	1.3	2.0	0.34
5	e0.04	7.5	14	34	28	79	20	14	6.1	1.9	2.0	0.44
6	e0.04	8.1	13	31	30	72	19	12	4.9	1.7	2.0	4.9
7	e0.04	7.1	12	29	31	77	16	11	4.6	1.4	2.0	19
8	e0.03	6.2	11	28	30	116	15	9.0	4.8	1.2	2.0	9.2
9	e0.03	5.8	11	26	28	139	14	14	5.1	0.94	2.0	10
10	e0.05	6.4	13	24	26	97	13	20	4.3	0.73	2.0	9.0
11	e0.04	5.7	21	24	24	87	12	16	4.3	0.45	1.2	5.6
12	e0.06	5.1	6.5	23	22	72	19	17	3.1	0.38	0.35	5.8
13	e0.06	7.6	14	22	80	58	17	14	2.3	0.33	0.35	6.5
14	e0.06	5.0	16	27	101	50	16	11	1.8	0.96	0.34	5.0
15	e0.06	9.0	15	27	91	46	20	12	1.5	0.74	0.35	3.6
16	e0.06	19	20	25	78	42	19	18	0.93	0.39	0.35	2.7
17	e0.07	7.4	17	23	65	37	18	27	1.1	0.27	0.35	2.7
18	e0.07	7.1	15	25	81	32	16	25	1.2	0.23	0.40	2.3
19	e0.07	11	14	24	92	38	14	25	1.3	0.23	0.42	1.8
20	e0.08	8.6	15	21	82	49	12	29	2.0	0.23	0.42	1.6
21	0.11	6.7	19	18	73	45	11	33	2.7	0.24	0.42	1.6
22	0.15	7.9	18	16	60	42	8.9	28	2.2	0.22	0.42	1.7
23	0.19	10	32	15	51	36	7.9	25	1.8	0.21	0.42	1.3
24	0.23	8.8	86	13	43	31	7.1	22	1.6	2.6	0.42	1.2
25	e0.12	7.9	75	12	38	27	6.1	19	1.2	3.1	0.42	1.4
26	e0.07	14	67	11	35	23	5.5	17	1.1	2.6	0.42	6.6
27	e2.5	31	62	10	35	20	5.1	17	1.3	2.3	0.42	6.6
28	20	24	54	9.6	31	20	6.5	16	1.3	2.2	0.39	10
29	22	21	60	9.6	28	17	9.8	11	1.5	2.2	0.35	21
30	20	20	59	12	---	15	9.5	9.1	1.2	2.2	0.35	21
31	18	---	61	12	---	14	---	8.2	---	2.1	0.35	---
Total	84.45	326.7	886.5	747.2	1,378	1,481	406.4	536.3	91.73	35.48	28.91	163.93
Mean	2.72	10.9	28.6	24.1	47.5	47.8	13.5	17.3	3.06	1.14	0.93	5.46
Max	22	31	86	58	101	139	20	33	8.2	3.1	2.0	21
Min	0.03	5.0	6.5	9.6	16	14	5.1	8.2	0.93	0.21	0.34	0.34
Cfsm	0.30	1.19	3.12	2.63	5.19	5.22	1.48	1.89	0.33	0.12	0.10	0.60
In.	0.34	1.33	3.60	3.03	5.60	6.01	1.65	2.18	0.37	0.14	0.12	0.67

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	9.36	14.8	22.0	20.1	17.9	25.1	25.6	18.0	13.1	5.49	6.59	6.84
Max	33.3	44.8	60.7	51.2	47.5	47.8	56.4	66.7	76.2	18.4	38.5	36.7
(WY) (1990)	(2007)	(1997)	(1996)	(2008)	(2008)	(2007)	(1989)	(2003)	(1990)	(2000)	(1987)	
Min	0.71	0.18	0.19	0.20	1.24	3.96	2.48	4.74	1.66	1.14	0.45	1.06
(WY) (1985)	(2002)	(2002)	(2002)	(2002)	(2002)	(1985)	(2005)	(2007)	(2008)	(1999)	(2001)	

01379780 GREEN POND BROOK BELOW PICATINNY LAKE, AT PICATINNY ARSENAL, NJ—Continued**SUMMARY STATISTICS**

	Calendar Year 2007		Water Year 2008		Water Years 1985 - 2008	
Annual total		5,621.07		6,166.60		
Annual mean		15.4		16.8		15.4
Highest annual mean					22.1	1990
Lowest annual mean					5.04	2002
Highest daily mean	330	Apr 16	139	Mar 9	a330	Apr 16, 2007
Lowest daily mean	0.03	Oct 8	a0.03	Oct 8, 9	0.03	Oct 8, 2007
Annual seven-day minimum	0.04	Oct 3	0.04	Oct 3	0.04	Oct 3, 2007
Maximum peak flow			b405	Nov 27	c1,300	Apr 16, 2007
Maximum peak stage			b4.18	Nov 27	d6.90	Apr 16, 2007
Instantaneous low flow			a0.03	Many days	0.00	Dec 31, 2001
Annual runoff (cfsm)		1.68		1.84		1.68
Annual runoff (inches)		22.83		25.04		22.83
10 percent exceeds	38		42		36	
50 percent exceeds	7.9		11		9.0	
90 percent exceeds	0.35		0.35		1.3	

a Estimated.

b From regulation at Picatinny Lake.

c From rating curve extended above 500 ft³/s.

d From high-water mark.

